<u>**R E M A R K S**</u>

Careful review and examination of the subject application are noted and appreciated.

Applicants thank Examiner Le for the indication of allowed and allowable matter.

<u>**SUPPORT FOR THE CLAIM AMENDMENTS**</u>

Support for the claim amendments may be found in the allowable claim 19 (moved into claim 1) and allowable claim 23 (moved into claim 11) Thus, no new matter has been added and no new issues have been raised.

<u>**IN THE DRAWINGS**</u>

Approval of the proposed amendment to FIG. 13 filed with the amendment mailed October 30, 2003 is respectfully requested.

<u>**CLAIM REJECTIONS UNDER 35 U.S.C. §112**</u>

The rejection of claims 1, 3-5, 7-11, 13-17 and 21-26 under 35 U.S.C. §112, second paragraph has been obviated in part and is respectfully traversed in part and should be withdrawn.

The phrase "function of an input voltage" is generally well-understood by those of ordinary skill in the art for the present invention. For example, the website Mathworld defines a "function" as "a relation which uniquely associates members of one

set with members of another set." (See Mathworld.wolfram.com/function.html) A function is commonly written as Y=F(X) to indicate that Y is a function of X. As such, functions are readily represented as curves on an X-Y graph where a value on the Y-axis is a function of the values along the X-axis. Three examples of a voltage as a function of an input voltage (e.g., Vpad) are illustrated in FIGS. 2, 3A and 3B of the application. Note that the title across the top of FIG.2 reads "Vout as a function of Vpad". Therefore, one of ordinary skill in the art would appear to understand the claim phrase "a voltage drop from said first gate to said first output is nonlinear as a function of said input voltage."

The "nonlinear" terminology in claims 1 and 11 is illustrated in FIG. 3B of the application. In particular, a curve in FIG. 3B illustrates a function of a difference between Vpad-Vout along the Y-axis as a function of Vpad along the X-axis. The curve illustrated in FIG. 3B is not a straight line and thus is nonlinear. Therefore, claims 1, 3-5, 7-11, 13-17 and 21-25 are fully compliant under 35 U.S.C. §112, second paragraph and the rejection should be withdrawn.

Claim 26 has been canceled and thus the rejection under 35 U.S.C. §112, second paragraph should be withdrawn.

## CLAIM REJECTIONS UNDER 35 U.S.C. §103

The rejection of claims 1, 3-5, 10, 11, 13 and 14 under 35 U.S.C. §103(a) as being unpatentable over Lien '651 in view of Talaga, Jr. '921 (hereafter Talaga) has been obviated by appropriate amendment and should be withdrawn.

The rejection of claims 1, 3-5, 7-11, 13-17 and 20 under 35 U.S.C. §103(a) as being unpatentable over Ito et al. '247 in view of Lien and Talaga has been obviated by appropriate amendment and should be withdrawn.

The rejection of claim 18 under 35 U.S.C. §103(a) as being unpatentable over Goto et al. '278 in view of Lien and Talaga has been obviated by appropriate amendment and should be withdrawn.

The allowable matter of claim 19 has been incorporated into claim 1. The allowable matter of claim 23 has been incorporated in to claim 11. Independent claim 18 and dependent claim 26 have been canceled. As such, the presently claimed invention is fully patentable over the cited references and the rejection should be withdrawn.
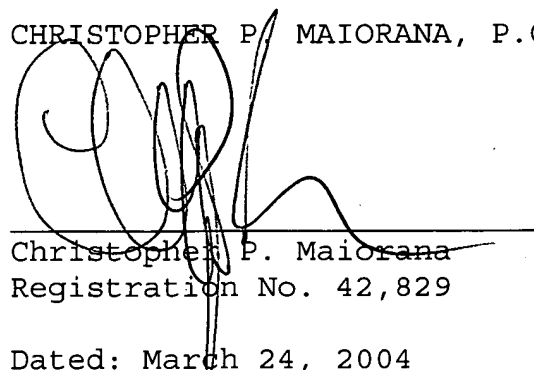
Accordingly, the present application is in condition for allowance. Early and favorable action by the Examiner is respectfully solicited.

The Examiner is respectfully invited to call the Applicants' representative at 586-498-0670 should it be deemed beneficial to further advance prosecution of the application.

If any additional fees are due, please charge Deposit Account No. 12-2252.

Respectfully submitted,

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